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Periodic Atlas of the Metroscape: Common Ground? Land Use along Portland's Urban Growth Boundary

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COMMON GROUND?

Land Use Change Along Portland's Urban Growth Boundary

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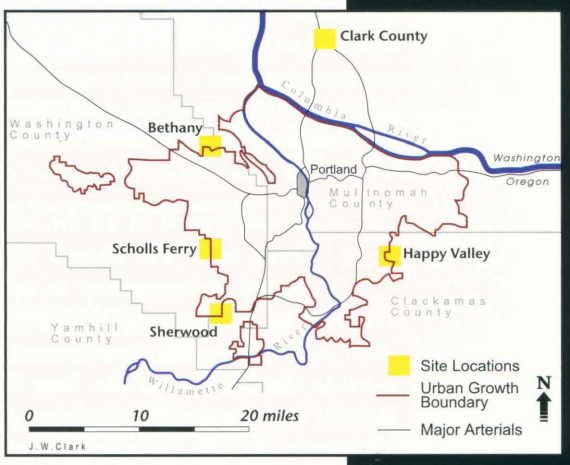
The terms typically used to portray Portland, Oregon's urban growth boundary (UGB) efforts convey images of a lively urban center and carefully planned suburban developments adjacent to prosperous farms on rich soils in the historically agricultural Willamette Valley. Portland's quality of urban life and success in containing urban sprawl are, indeed, exemplary, especially with respect to U.S. cities of similar size. A closer look at how the UGB has functioned in the metropolitan area, however, reveals a transitional landscape with mixed uses reflecting changes in how the state regulatory agency has implemented the 1973 legislation mandating urban growth boundaries in Oregon cities. This landscape reflects differences in how the counties of the Portland metropolitan area have interpreted state laws, the assortment of variances granted to developers and individuals, and the tensions inherent in enacting strict land use laws. It also embodies the challenges planners and area residents will face in crafting a landscape that accommodates the goals of the UGB – preserving agricultural land and containing urban sprawl – with projected increases in population and ongoing demand for exurban homes.

Oregon's urban growth boundaries were developed from a rural perspective to protect farm and forest lands from urban encroachment, however, they must undergo periodic review to ensure that a 20-year supply of buildable land exists. Portland's UGB, adopted in 1979 and covering 24 cities and the urban portions of three counties, included just over 232,000 acres of land, or 363 square miles. It was designed to include 20 years worth of growth and indeed it has, as by 1999 we observed sharp boundaries between urban and rural land use along parts of the boundary. Future suburban growth can be accommodated with either expansions of the boundary while building at typical suburban densities or through higher density development and less expansion of the UGB.

In this study we analyze the impact of the urban growth boundary on rural landscape change in Portland, Oregon, and Clark County, Washington, and assess the importance of rural and agricultural landscapes to residents of the rural-urban fringe. We selected five, 4-square mile areas in the greater Portland metropolitan area for the study. Four are in Oregon and cover the transition area from urban to rural land uses under different levels of pressure along the state-mandated and Metro-delineated urban growth boundary. One is in the less regulated land use environment of Clark County, Washington. The kinds of questions we addressed include: How does the value of rural landscape as urban amenity vary between urban and rural areas? Between areas already experiencing significant land use change and those beginning to feel the pressure of development? Between a highly regulated land use environment such as that found on the Oregon side of the Greater Portland Metropolitan area and the more mixed use landscape of Clark County, Washington? Finally, how can this information serve policy makers and people concerned about the volatile issues of urban sprawl and the regulatory solutions to problems of urban growth? Our complete study, including survey results, maps, and air photographs for each of the study sites can be found on the Internet at: http://www.rlua.pdx.edu/.



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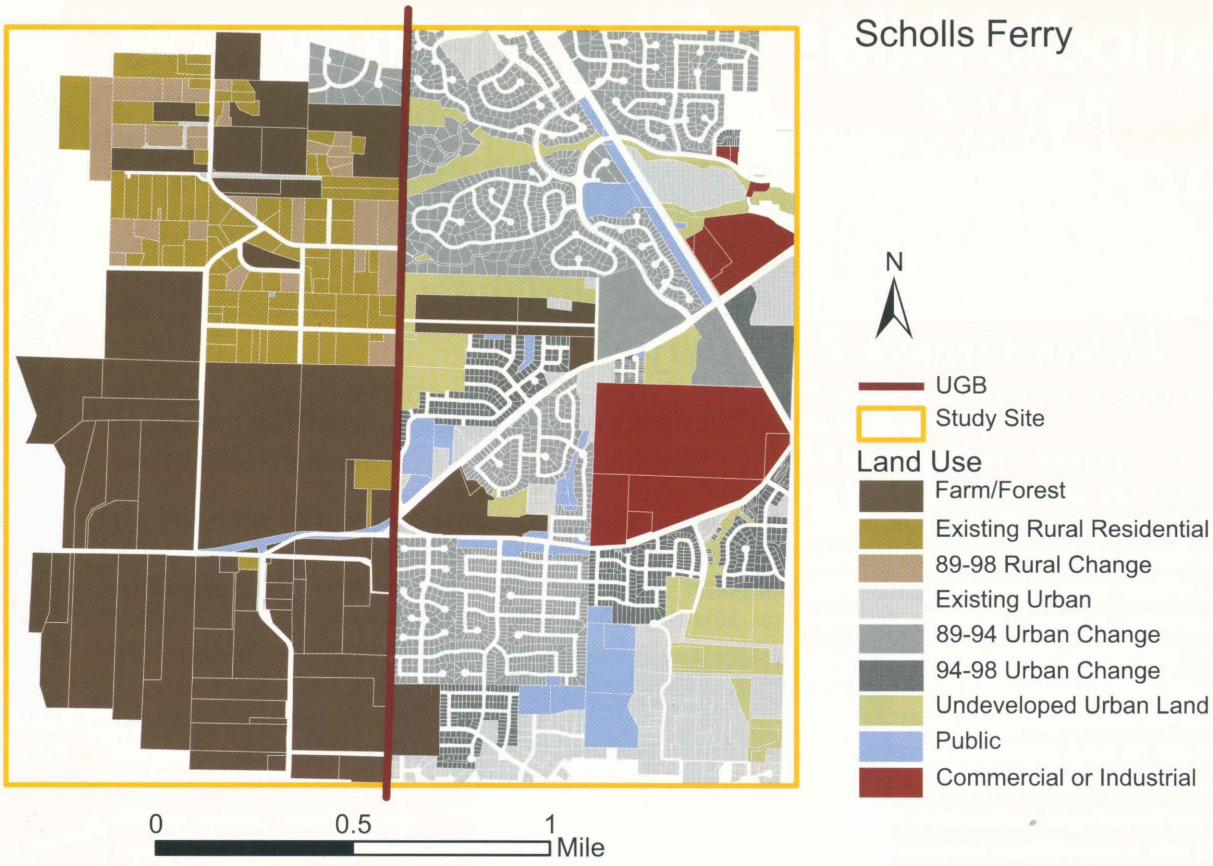
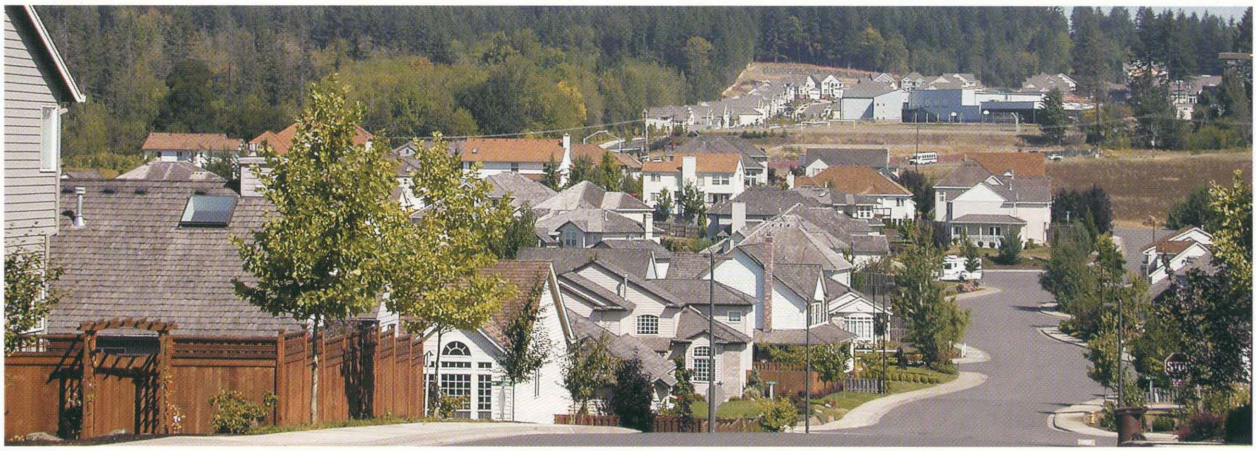


As was typical of all the study sites, the Scholls Ferry area was almost entirely rural in 1989. Rapid development in the period 1989-1994 resulted in several large subdivisions, including the 400+ acre Murrayhill development, and a 16-lot parcel outside the UGB. Of the four Portland study areas Scholls experienced development of the largest number of parcels (2,338) and the greatest amount of acreage (489 acres). Land use within the UGB now includes several subdivisions, a school, ongoing construction of housing developments, and a large gravel pit. It also includes a few parcels of land still actively cultivated in either Christmas trees or field crops.

North of Scholls Ferry Road land holdings outside the UGB are fragmented into 1-20 acre parcels and form a largely rural residential landscape. Of the study five sites, this area has had the largest number of new homes built outside of the UGB since 1980. Like much of the Happy Valley site, the area to the north of Scholls Ferry Road is hilly and forested, not prime farmland, and topography likely contributes to parcelization.

The southwest portions of the study site are prime farmland and represent the kind of agricultural landscape that the UGB was designed to protect: rolling fields of crimson clover, winter wheat, hazelnut orchards, and vineyards. Larger parcels in this area are designated for exclusive farm use. Subdividing into smaller units is not permitted by current land use laws.



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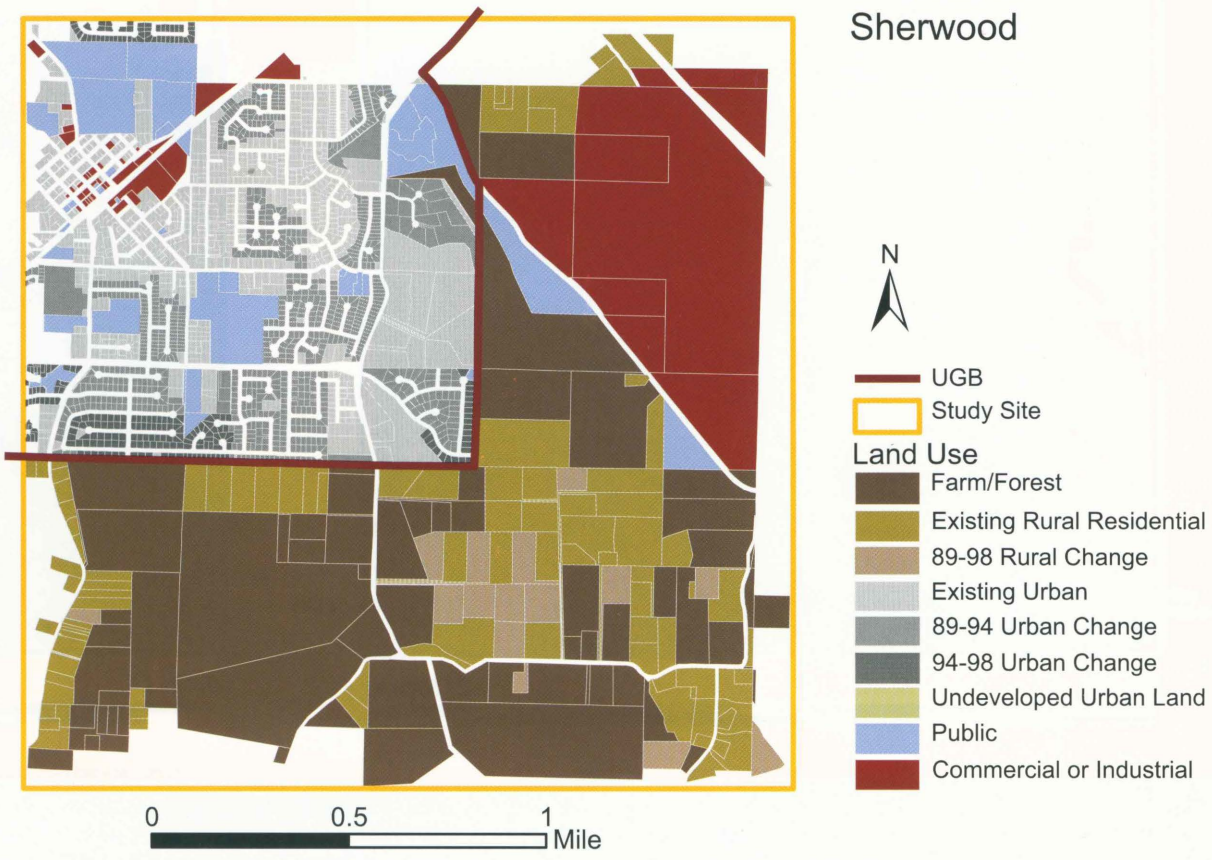
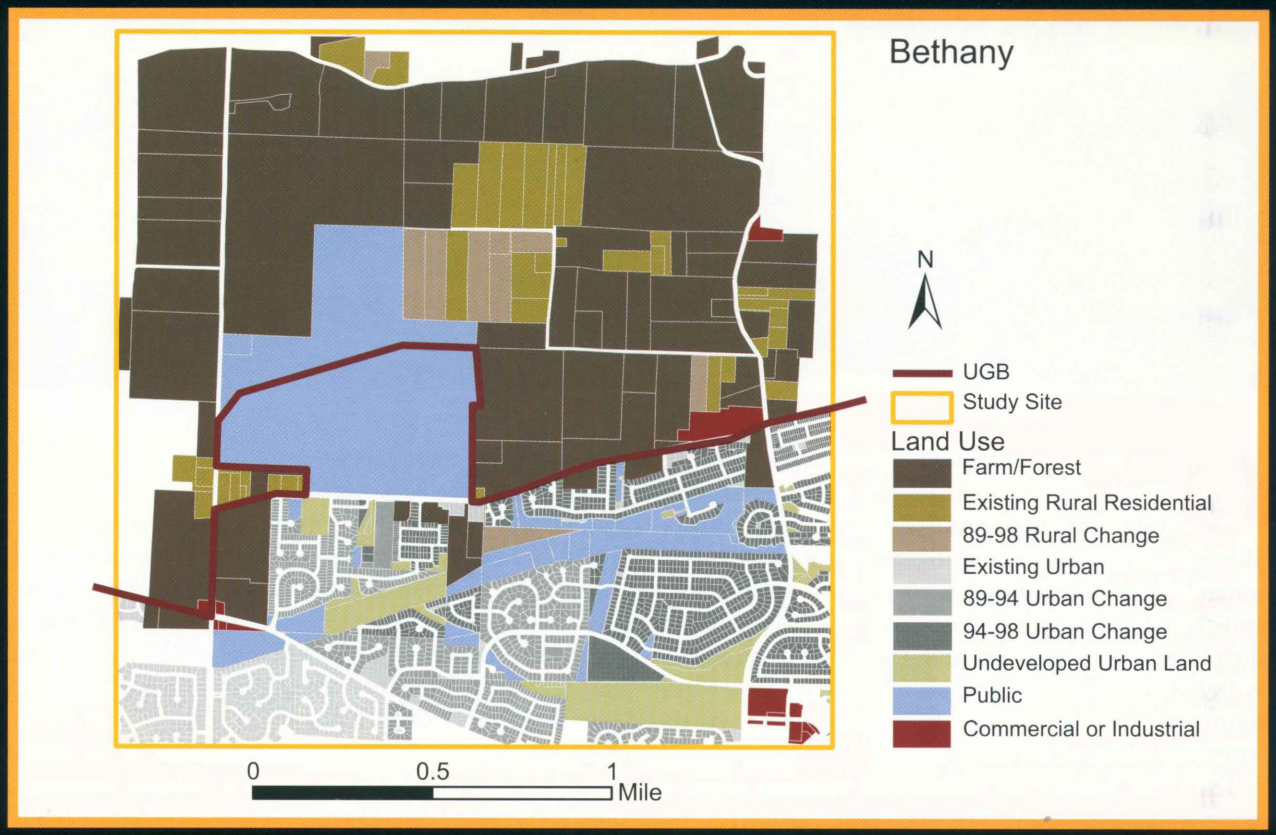
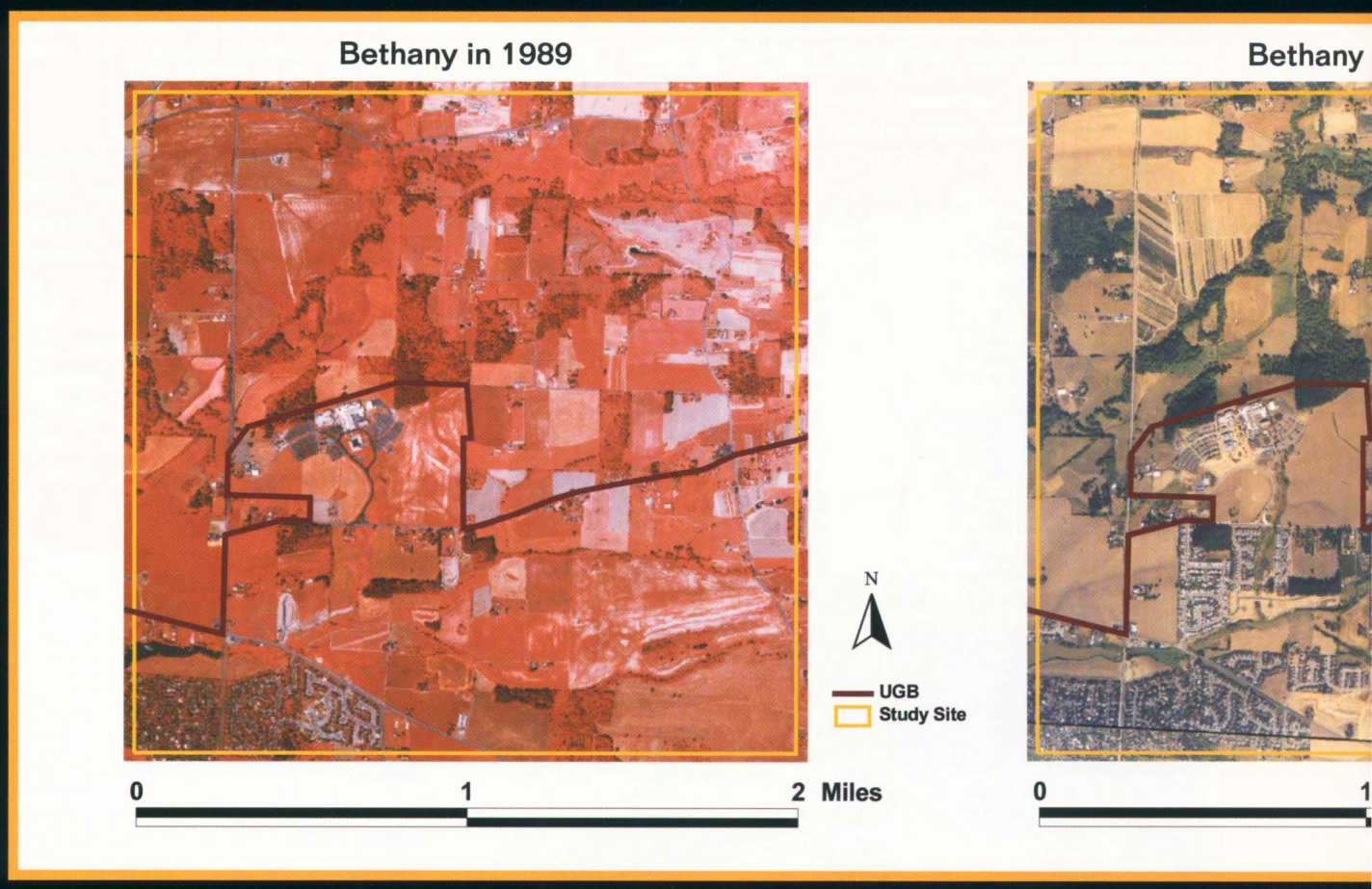
Once three days distant from Portland by wagon, Sherwood is now a growing bedroom community for metropolitan area commuters. Sherwood is unique among the study sites because it contains a townsite that existed prior to metropolitan growth and suburban development. The historic townsite of Sherwood (first settled in the 1850s, incorporated in 1892) is oriented toward a set of railroad tracks which were completed in the late 1880s and cut across the northwest corner of the study site.

The UGB follows the eastern and southern edges of incorporated Sherwood. The southern part of the study area is in Clackamas County; the northern part is in Washington County. Part of the study area to the east of incorporated Sherwood consists of a private shooting range, a large gravel operation, and very few rural residents. South of Sherwood proper, in parts of both counties, is rural residential development with some farms.

The most obvious land use change in this study site is the growth of Sherwood out toward the edges of the UGB. Between 1989 and 1994 approximately 179 acres and 843 parcels were developed. An additional 43 acres and 232 parcels were developed within the UGB between 1994 and 1998. Outside the UGB expansion of developed area is not apparent, although changes in the nature and character of dwellings create a cultural landscape contrary to the exclusive farm use presumed of areas outside the UGB. Transformation of rural and farm residences into exurban homes for people who are not full-time farmers reflects the transitional nature of this zone.







Our work used air photos to analyze the type and rate of land use change within the five areas. Photographs from 1989, 1994, and 1998 were brought into a GIS, then superimposed with layers of land use data, including lot size, from Metro's Regional Land Information System (RLIS). The examples on this page are from the Bethany site. We plotted change in land use in four square mile parcels for

Case Study: Bethany

This area presents the most dramatic contrast between rural and urban development and is the site of some of the most public conflicts over future land use. Suburban development has grown rapidly and uniformly up to the UGB and development has occurred across gently rolling agricultural land. 2216 parcels were developed between 1989 and 1998, second in number only to the Scholls Ferry area. An abrupt boundary here results from this rapid growth although exurban homes dot the edges of farm fields in the part of the area. There is little in the way of exurban homes or rural residential development right along the boundary. Topography accentuates the visual impact of landscape change and contributes to the sense that the limits of UGB policy are being tested here. In 2002 Metro approved an expansion of the boundary in this area. Ironically, the adjacent campus of Portland Community College holds an annual exhibition of horse drawn farm equipment and celebration of agricultural history on a site right at the edge of urban expansion.

The Bethany site has the least fragmented rural land holdings (66 owner occupied parcels), the largest total area zoned for agricultural use (1119 acres), and the largest average rural parcel size (10 acres). Rural areas of the Bethany site have had the least building activity of the four sites, with relatively few exurban homes built in the last 20 years.

Inside the UGB land use was almost entirely agricultural until 1990. A small subdivision in the southeast corner of the study site was developed in the 1970s and the Rock Creek campus of Portland Community College was established in 1976. The rest of the area inside the UGB has filled in with subdivisions or commercial development within the last 10 years. Exceptions on the 1998 map of land use include a transmission line corridor, a small wetland and lots that have subsequently been developed. Pressure for growth in this area and in the Scholls Ferry area has been particularly intense because of job growth in Washington County, the site for several corporate headquarters and or manufacturing centers including Intel, Nike, Tektronix, and other industries.

994

N

UGB
Study Site

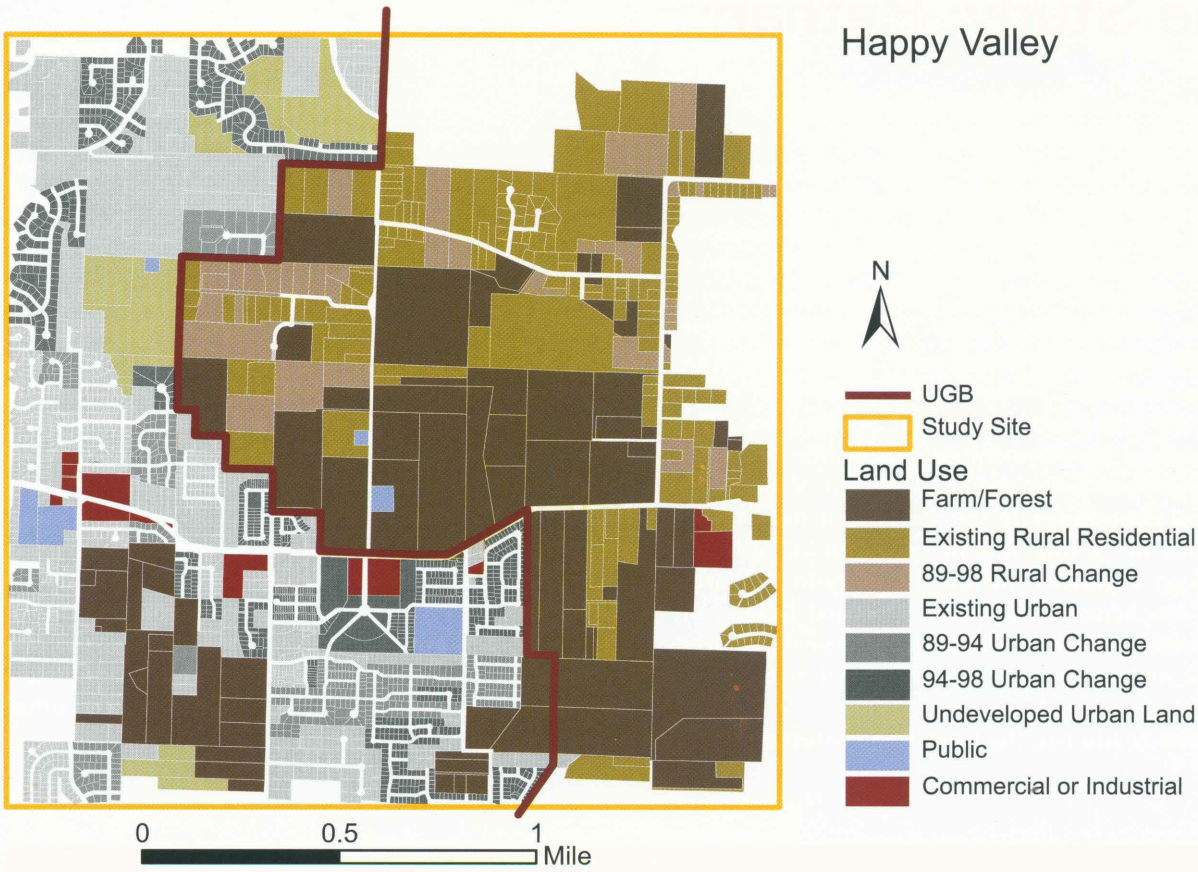
2 Miles

Bethany in 1998

N

UGB
Study Site
1999 Parcels

0 1 2 Miles



The Happy Valley study site is located in Clackamas County, southeast of Portland. The jurisdiction of Happy Valley is recently incorporated (1965) and exclusively residential. It is the fastest growing community in Clackamas County. Development occurred most rapidly in this area between 1994 and 1998 when 1043 lots or 42% of the total lots in the study area were developed. Four hundred twenty lots (17%) were developed between 1989 and 1994. There is still considerable undeveloped land within the UGB in this study site. New housing is concentrated on the slopes of Mt. Scott and along the edges of the UGB indicating a preference for rural views and Mt. Hood views when site conditions permit. Newer development within the UGB consists mostly of larger homes (3000 square feet or larger) on smaller lots (7 to 10 homes per acre). Immediately south of the study area and within the UGB is Sunnyside Village, a neo-traditional community in the New Urbanism style.

Happy Valley has the most rural residential development of the four Oregon study sites. This is attributable to the lack of prime agricultural land, hilly topography, and a zoning history that allowed farmers and rural residents in the 1960s and 1970s to subdivide their land into five acre lots. Within one mile of the UGB many of these lots have been developed within the last 10 years. Rural areas in the Happy Valley study site consist primarily of large lot residential (older ranch style homes, remodels, and new rural 'mansions'), minor farming activities, a few traditional farm operations (cattle, hay, nursery), and a golf course.

In December of 1998 the UGB was expanded in the Happy Valley area to include parts of our "outside UGB" study area and took effect 90 days later. In our analysis we used the pre-1999 UGB in order to match air photography and RLIS coverage. Our field survey in 2001 indicates some new homes, but no subdivision developments in the newly expanded UGB area. This reflects a different subregional demand for housing and is in contrast to the Bethany area.

Bethany	
	developed 89-94
	developed 94-98
	total developed 89-98
Scholls Ferry	
	developed 89-94
	developed 94-98
	total developed 89-98
Sherwood	
	developed 89-94
	developed 94-98
	total developed 89-98
Happy Valley	
	developed 89-94
	developed 94-98
	total developed 89-98
Total	

Number of parcels and acreage developed within th UGB in the four Portland study sites, 1989-1998.

The Clark County, Washington, area is more similar to Happy Valley and includes a broad transition zone of rural, non-farm uses between the suburban and agricultural landscapes. As growth in Portland presses against the UGB, it is clear that there is residential spillover to Clark County and to the outlying Oregon towns and cities around Portland, each of which has its own UGB. Critics of Portland's UGB have suggested that Clark County, Washington, has absorbed much of the sprawl that might have otherwise occurred in Oregon. Land use maps and air photography confirm this suggestion, however, development has come mainly in the form of large lot rural residential sites, not in proliferation of subdivisions. Our study site was selected to capture the edge of suburban expansion north of Vancouver, Washington, in an area that included both urban and rural zoning. Most of the area zoned urban is large lot rural residential, not subdivisions, and much of the area zoned rural is in 1-20 acre parcels interspersed with farms, not unlike the Happy Valley study area.

of parcels	acreage
921	148
1295	190
2216	338
1633	379
705	110
2338	489
843	179
232	43
1075	222
420	91
1043	185
1463	276
7092	1325

In the Portland metropolitan area high density suburban development has pushed toward the UGB within the last 10 years. Based on survey responses, suburban residents living close to the boundary and protected landscapes, place a high value on adjacent rural land use. These residents perceive the rural landscape as a natural area as well as an agricultural zone. They are strongly opposed to expansion of the UGB and any development of adjacent farmland. Outside the UGB we found a mix of farm/forest resource lands and large lot rural residential parcels. The scale and character of farms immediately outside the UGB has generated little opposition to farm operations. However, rural residents view adjacent suburban development as problematic and detrimental to their rural lifestyles. Clark County residents in our study site are more opposed to urban development than their Portland counterparts. Parcel fragmentation and survey responses in rural Clark County support the idea that many people are moving to this area in search of a rural residential lifestyle, opportunities for which are limited in the Portland metropolitan area.

Oversight of the complex landscape at the rural-urban interface includes decision making by agencies at the city, county, regional, and state levels. This regulatory environment helps manage on a large scale the major goals of land use planning in the rural- urban setting, which are containing urban sprawl and protecting farmlands. Yet it is clear from our study that rural landscape amenity is more complex than the farmland preservation and anti-sprawl controls being implemented at present. State planning goals have a broader scope which acknowledges the importance of landscapes as amenities; however this has not been part of the discussion in the greater Portland metropolitan area. The legacy of large lot residential development in parts of the study sites and the rapid growth of suburban development up to the boundaries of farmland in other areas underscores the fact that the visual impact of development has not been a priority from the within UGB perspective. The challenge for land use planners at all levels is to creatively consider how future development along the urban growth boundary affects landscapes and land use in adjacent rural areas.